copper, the costs of those fiber loops should not be included in determining average loop costs. But this does not mean that CLECs' cost for the loops they do receive should plummet, as MCI proposes. As noted above, CLECs are not charged based on the particular type of loop they take, but on the average forward-looking cost of providing a voice grade loop throughout the network; whether the CLEC obtains that capacity on an "old" copper loop or a new one, the capacity and capabilities the CLEC obtains are the same.

2. Switching

a) Switch Prices

Forward-looking switching investment should be measured based on the actual prices an incumbent pays for the mix of switching equipment that incumbent intends to purchase going forward. The appropriate switching analysis should move away from the simplistic "new switch discount" versus "growth equipment discount" dichotomy. Manufacturers now sell few new switches and instead employ a complex mixture of discounts and pricing for the types of switching equipment they offer to carriers. The constant principle underlying today's discounts and prices, however, is that they are designed by the switch manufacturers to ensure that they recover their costs given the mix of switching equipment that carriers are expected to buy. Thus, the most realistic measure of forward-looking switching investment is the prices the incumbent actually pays today for the full range of equipment it expects to purchase going forward.

Shelanski Decl. ¶¶ 45-47.

By contrast, AT&T's and MCI's purported "life-cycle" methodologies radically underestimate switching investment by perpetuating the flawed premise that forward-looking switching costs should be "the purchase price of new switches capable of serving all current and some additional demand, plus the present value of any growth equipment that an efficient carrier would expect to add to allow the switch to serve additional demand over the life of the switch."

AT&T Comments at 72-74; *see also* MCI Comments at 28. This approach does not reflect the "life cycle" of switching equipment in any real carrier's network. Instead, it assumes that switching prices should be determined as though all switching capacity in the existing network is purchased all at once as new equipment (at a new switch discount), perfectly sized to meet current and foreseeable demand. But that is not how switching equipment is purchased. In the real world, an efficient and rational carrier would keep its existing switches and purchase growth, replacement, and upgrade equipment as needed to meet current and future demand. *See* Shelanski/Tardiff Reply Decl. ¶ 26. This approach, not AT&T/MCI's unrealistic assumptions, yields the appropriate mix of equipment that the incumbent will use to provide the switching UNE to CLECs.

The CLECs' flawed approach cannot be remedied by their inclusion of a small amount of growth equipment every two years. *See* AT&T Comments at 73-74; MCI Comments at 27-28. In point of fact, an efficient and rational carrier using an actual network makes annual switching equipment purchases that far exceed 2% growth additions to serve increased demand. In 2001, for example, Verizon alone spent approximately \$1.5 *billion* on capital for switching equipment. Not only is this amount far more than the meager growth additions contemplated by AT&T/MCI's approach, but these purchases also included a wide range of switching equipment, including upgrades and replacement for different pieces of a switch. Contrary to AT&T's claims, the switching investment *should* include technology upgrades and other replacement equipment to the extent that an incumbent purchases them. This does not mean, as AT&T suggests, that CLECs would be charged for "technology that does not yet exist (and that the incumbent does not use)." AT&T Comments at 74-75. Instead, it means that the rates CLECs pay for switching UNEs would take into account the full range of switching equipment that an

incumbent actually purchases and utilizes, including upgrades and replacement components needed to maintain a technologically up-to-date switching infrastructure. AT&T's suggestion that the pricing methodology should include only new switch purchases and a small amount of growth equipment would ignore incumbents' actual, significant investments in such equipment. 58/

The CLECs' approach is further flawed because it unrealistically assumes that all existing switch equipment would be purchased at an extraordinary "new switch" discount that incumbents have received for only a few isolated new switch purchases. The assumption that all of an incumbent's current switching capacity could be replicated with all-new switches purchased at discounts of 90% or more is pure fantasy that seriously understates switching investment. To the extent that switch manufacturers offer incumbents extraordinarily high discounts on the few new switches purchased today, they do so because they earn most of their revenues from replacement components and "growth" additions. If a carrier attempted to purchase all, or most, of its switching capacity at new switch prices, vendors would have no choice but to reduce the discount levels for new switches from those they offer today. Shelanski Decl. ¶ 46.

As the D.C. Circuit and the Commission have recognized, vendors offer high new switch discounts to "lock in" carriers to purchase the relatively more expensive growth additions and

The Commission also should reject MCI's extreme assertion that incumbents should not be permitted to recover the capital costs for their existing Class 5 switches if those switches will be replaced in the future by packet switches. MCI Comments at 25-26. Regardless of the future technology employed by incumbents, the cost of providing switching over their current switching infrastructure inescapably includes the incumbents' capital expenditures for the current switching infrastructure. Were incumbents' current capital costs excluded from switching investment costs, incumbents would unfairly and inefficiently be required to further subsidize the CLECs' switching costs.

individual components, and if they could not do so, the high, new switch discounts would not exist. MCI denies this effect, arguing that, unlike the seller behind the loss-leading structure of a subscriber book club, switch manufacturers do not require specific commitments for follow-up purchases. MCI Comments at 27-28. But a switch manufacturer needs no such explicit commitment from the purchasing carrier: unlike in MCI's book club example, the purchase of a new switch inherently contains a commitment to make follow-up switch purchases because a manufacturer's proprietary technology ties the carrier to using that same manufacturer's equipment to grow, upgrade, and even maintain the switch over its life. See AT&T Corp. v. FCC, 220 F.3d 607, 618 (D.C. Cir. 2000).

b) Switching Rate Structure

The Commission should reject the CLECs' proposed flat rate switching structure and reaffirm that "incumbent LECs' rates for interconnection and unbundled elements must recover costs in a manner that reflects the way they are incurred." As the Commission has previously recognized on numerous occasions, a significant portion of switching costs are usage-sensitive. 61/

^{59/} See AT&T Corp. v. FCC, 220 F.3d 607, 618 (D.C. Cir. 2000); Oral Argument Tr. at 35, AT&T Corp. v. FCC (argued Apr. 24, 2000); see also Virginia Arbitration Order ¶ 386 n.1014 ("If carriers did not typically grow their switches over time, it is unlikely that switch vendors would provide relatively large discounts on the initial switch investments.").

See also First Report and Order, Implementation of the Local Competition Provision in the Telecommunications Act of 1996, 11 FCC Rcd 15499, 15874 ¶ 743 (1996) ("Local Competition Order").

Local Competition Order at 15507 ¶ 6 (setting usage-sensitive proxy rate for switching); Notice of Proposed Rulemaking, Third Report and Order, and Notice of Inquiry, Access Charge Reform, Price Cap Performance Review for Local Exchange Carriers; Transport Rate Structure and Pricing Usage of the Public Switched Network by Information Service and Internet Access Providers, 11 FCC 21354, 21392-93 ¶ 73 (1996) ("Access Charge Reform NPRM"). ("The central processing portion of the switch, and many trunk-side ports, are shared local switching facilities because they are used to carry the traffic of several access customers, and so should be priced on a usage-sensitive basis.").

That portion should be recovered on a per-minute basis in order to send efficient economic signals to the carriers who choose between purchasing access to unbundled switching elements and providing their own. Recovery of usage-sensitive costs on a flat-rate basis, as AT&T and MCI suggest, would send inefficient economic signals and create subsidies for CLECs who target high-volume users. AT&T Comments at 75-78; MCI Comments at 29-30. Thus, the Commission has repeatedly found that switching costs should be recovered on a usage-sensitive basis. 62/ Indeed, before its complete about-face in this proceeding, even AT&T opposed a flat-rate structure on the ground that it "does not properly align rates and costs." 63/

Although the CLECs assert that recovery of a portion of switching costs through a usage-sensitive rate would "create a number of distortions, and give the incumbent a big competitive advantage," AT&T Comments at 77, just the opposite is true. A flat-rate structure requires all users to pay the cost of an average customer's usage level regardless of their actual usage levels. As a result, customers with higher-than-average usage would avoid paying their fair share of traffic-sensitive switching usage costs. At the same time, low-volume customers would pay for more than their fair share and effectively subsidize the high-volume customers. Because CLECs' target and generally serve high-volume customers, the failure to allocate usage-sensitive

See, e.g., Access Charge Reform NPRM at 21392-93 ¶ 73 ("The central processing portion of the switch, and many trunk-side ports, are shared local switching facilities because they are used to carry the traffic of several access customers, and so should be priced on a usage-sensitive basis."); Memorandum Opinion and Order, Application by Verizon Virginia Inc., Verizon Long Distance Virginia Inc., Verizon Enterprise Solutions Virginia Inc., Verizon Global Networks Inc., and Verizon Select Services of Virginia Inc., for Authorization To Provide In-Region, InterLATA Services in Virginia, 17 FCC Rcd 21880, 21948-49 ¶ 121 (2002).

Direct Testimony of Robert J. Kirchenberger on Behalf of AT&T at 15 (July 31, 2001); see also Joint Initial Post-Hearing Brief of WorldCom, Inc. and AT&T on Switch Cost Issues at 27 (Jan. 17, 2002) (arguing that some switching costs are traffic-sensitive and must be recovered in the same manner as they are incurred.)

costs to their high-volume customers would be a boon to CLECs and allow them to serve those customers without bearing the full costs of doing so. By contrast, usage-sensitive recovery of switching costs has a proven record of no negative impact on competitors. Indeed, other than the Wireline Competition Bureau's recent decision in the Virginia Arbitration, every other jurisdiction where Verizon provides service has set end-office switching rates as a combination of a per-minute and flat-rate port charge for Verizon. 64/

The CLECs further err in claiming that the only usage-sensitive switching costs are "peak period" costs and that switch processor and memory costs are *not* usage-sensitive. *See* AT&T Comments at 76-78. Switch processors and memory resources are initially sized based on their expected future usage: the size of the switch processor and memory resources — and their commensurate costs — increase as the level of expected usage increases. Accordingly, the cost of the switch processor varies depending on the level of anticipated usage for which it is sized. AT&T incorrectly argues that a flat-rate recovery structure accurately reflects cost causation because incumbents pay a "fixed up-front fee to manufacturers for a switch with sufficient memory and processing power to serve all current and expected demand." AT&T Comments at 76. But, while the incumbents pay the switch manufacturer in advance for the switch processor capacity, that fee is not "fixed" but is usage-sensitive because it varies based on the amount of usage incumbents expect and therefore the amount of capacity they must purchase.

B. Operating Expenses

The operating expenses the incumbent actually incurs are the best measure of forward-looking expenses. Those expenses therefore should be used in calculating the annual cost factors

AT&T is simply wrong when it asserts that "many" state commissions have adopted a flat-rate structure; indeed, it identifies only a handful of such states. AT&T Comments at 75 & n.26.

that, as the *NPRM* recognizes, are the most practical way of addressing expenses in UNE cost studies. This approach will ensure that UNE rates reflect the real-world attributes of the incumbent's network and will send more realistic and thus more relevant economic signals than basing expenses on the extreme, entirely hypothetical assumptions typically advocated by the CLECs. 66/

The ILECs' ARMIS reports provide a verifiable, publicly available source for such data. Even AT&T concedes that it makes sense to use ARMIS in determining UNE-related operating expenses, *see* AT&T Comments at 101, and the CLECs use the incumbents' ARMIS reports as a matter of course in their TELRIC cost models. Since *none* of the commenters oppose the use of ARMIS for determining UNE operating expenses, or the use of annual cost factors based on reported ARMIS expenses, the Commission should clarify that the states should uniformly adopt this approach. 67/

While the CLECs agree that ARMIS is the appropriate starting place, they contend that regulators should reduce the incumbents' expenses to account for hypothetical productivity achievements that they claim would be achieved in a competitive environment. AT&T, for

As the *NPRM* explains, an annual cost factor is simply a ratio of expenses to investment determined on an account-by-account basis. *See NPRM* ¶ 109.

The CLEC Coalition proposes that operating expenses be reduced if the FCC shortens asset lives as a proxy for accelerated depreciation. CLEC TELRIC Coalition Comments at 85. It maintains that this should be done because an ILEC will be avoiding the higher expenses at the end of an asset's life. This is a non sequitur. Shortening the depreciable life for UNE rate purposes to ensure economic recovery does not change the real world annual expenses incurred in connection with the asset.

Of course, if, as under the Commission's current pricing rules, regulators reduce forward-looking investment costs, an adjustment would be required to the annual expense factors that are based on ARMIS to avoid artificial reductions to unit expenses. *See* Verizon Comments at 60 & n.102.

example, asserts that the incumbent's expenses should be reduced because other network industries, such as railroads, natural gas, and airlines, allegedly experienced substantial cost reductions following regulatory regime changes intended to make those industries more competitive. *See* AT&T Comments at 101 n.55; Declaration of John C. Klick on Behalf of AT&T Corp. ¶¶ 119-20 (Dec. 16, 2003) ("AT&T Comments, Klick Decl."). But this argument ignores the fact — as the CLECs do throughout their comments — that it has been seven years since the 1996 Act was passed. As described above, incumbents are already subject to significant competition, and incumbents' current expenses already reflect the regulatory and competitive pressures to which the CLECs point. Indeed, as carriers continue to move forward with their aggressive cost cutting programs, analysts at Morgan Stanley "worry that eventually one runs into the issue of diminishing returns where further cuts hit muscle and bone rather that fat."

The CLECs nonetheless insist that current expenses must be further reduced to reflect hypothetical technology and system improvements that supposedly will decrease maintenance and labor costs in the future. *See* AT&T Comments at 100-01. But tellingly, the CLECs do

Simon Flannery, *et al.*, Morgan Stanley Equity Research, Telecom Services: 2004 in Prospect: Listening to the Investor at 7 (Jan. 12, 2004). And analysts at Needham are concerned that the ability of BOCs to adjust cost structures and cut capital expenditures to maintain healthy cash flows and reduce debt will not continue. If revenues decline in the near future, they warn "the Bells could find it more challenging to eliminate costs and reduce capex, leading to pressure on margins and free cash flow, possibly resulting in dividend cuts and debt maturity troubles." Vik Grover, Needham Equity Research, *New Years Resolution-Avoid the Bells*, at 2 (Dec. 29, 2003).

AT&T argues that expenses must be reduced to reflect improved efficiencies and new technological deployments that may have occurred subsequent to the study year data used in any particular UNE cost study. See AT&T Comments, Klick Decl. ¶¶ 127-29. But this is a false concern that certainly does not merit hypothetical reduction to UNE expenses. First, if the UNE-rate setting process is improved by adoption of rules clarifying that rates should be set on the incumbent's verifiable, real-world data, the time lag to which AT&T refers will be substantially

not identify these "improvements" or explain how they will reduce costs; their argument is purely hypothetical. Nor, of course, do the CLECs include the investment that would be required to implement these alleged improved technologies. And in any event, if the incumbent itself will not actually enjoy the imaginary expense savings the CLECs advocate, basing UNE rates on such reduced expenses will send entirely false economic signals. Reducing expenses to unattainable levels encourages uneconomic reliance on UNEs even where a CLEC operating its own network could match or beat the incumbent's *real* forward-looking costs, and fails to compensate the incumbent for its unavoidable day-to-day costs. Thus, in clarifying that states should use the incumbent's ARMIS operating expenses to determine UNE rates, the Commission should make clear that artificial, hypothetical expense reductions are not permitted.

Finally, AT&T claims expenses must be reduced to account for expenses related to UNEs that — following the Commission's determinations in the *Triennial Review Order*, CLECs may no longer lease. *See* AT&T Comments at 54, 101; MCI Comments at 5. In particular, AT&T contends that the incumbent's expenses would have to be reduced to reflect expenses related to broadband services and facilities that incumbents are not required to unbundle. AT&T Comments at 54. This concern is invalid when expenses are determined using the annual cost factor approach. As noted, cost factors are ratios of expenses to the categories of investment that are included in the cost study (and actually used to provide UNEs). Since broadband-related investment already is excluded from Verizon's cost studies, broadband-related expenses also are

reduced. Second, use of an annual cost factor process will ensure that expenses reflect the actual technological deployments that will be in place during the period the rates will be in effect, because only the investment actually in place is included in the calculation of the expenses to investment ratios. Third, any actual inflation or other adjustments that the incumbent has experienced should be captured in the incumbent's actual expenses.

excluded, and the share of common costs that would be borne by broadband investment likewise is excluded. The same would be true if, for example, switching were no longer unbundled in a particular state; in that case, both switching investment and switching related-expenses would be excluded from the cost study, and the expenses that were included in the study would reflect a reduced share of common overhead. Indeed, AT&T itself supports this approach, which belies its concern on this point. AT&T Comments at 101.

C. Depreciation

1. Depreciation Lives

The Commission should direct regulators to use the incumbent's depreciation lives developed pursuant to Generally Accepted Accounting Principles ("GAAP") when setting UNE rates. A clear, bright-line rule requiring the use of the GAAP lives will ensure that UNE rates recover the depreciation expenses that the incumbent actually will incur, thus sending accurate economic signals. GAAP is an intrinsically forward-looking methodology for determining depreciation lives that requires ILECs to take into account the effect that actual and expected competition and technological change are expected to have during the period of time an asset will produce economic value. *See* Verizon Comments at 61-62. GAAP lives are reviewed and verified regularly (internally and by independent auditors), and are used annually in the incumbents' audited financial reports. These lives stand in stark contrast to the lives prescribed by the Commission and advocated by the CLECs, which do not measure the risks affecting UNE assets today. *See* Verizon Comments at 62; Declaration of John M. Lacey Submitted in Support of the Comments of Verizon Telephone Companies ¶ 22 (Dec. 16, 2003) ("Lacey Decl.").

There is no merit to the CLECs' refrain that GAAP is an inherently biased methodology.

To begin with, in light of the explicit endorsement of GAAP by the SEC and the American

Institute of Certified Public Accountants as well as other federal agencies, *see* Verizon

Comments at 64, the CLECs' self-serving suggestion that the methodology is somehow flawed or suspect should be dismissed out of hand. In any event, the sole support to which they point for their criticism of GAAP is the stale and recycled claim that GAAP is governed by the principle of "conservatism" and thus is designed to select shorter, rather than longer, lives. But as Dr. Lacey explains, GAAP is in no way governed by conservatism. See Reply Declaration of John M. Lacey in Support of the Reply Comments of Verizon Telephone Companies ¶ 8 (Jan. 30, 2004) ("Lacey Reply Decl."). In fact, the role of conservatism was relegated to a very minor one by the Financial Accounting Standards Board ("FASB") over two decades ago, and that role was made unequivocally clear when the previous definition of conservatism was expressly rescinded as a part of GAAP over a decade ago. See Verizon Comments at 65-66; Lacey Decl. ¶¶ 32-34; Lacey Reply Decl ¶ 8. Any systematic bias toward shorter lives in financial reporting is directly contrary to GAAP as currently articulated, which requires neutrality and reliability above all else. In fact, GAAP specifically requires that the data used in financial reporting contain no "bias intended to attain a predetermined result or to induce a particular mode of behavior."70/

The CLECs next claim that the actual GAAP lives used for incumbents' financial reports are nonetheless inherently biased because of incumbent LECs' alleged incentives to understate their depreciation lives. MCI Comments at 35; Declaration of Michael J. Majoros, Jr. on Behalf of MCI at 22-25 (Dec. 16, 2003) ("MCI Comments, Majoros Decl."); AT&T Comments at 97; Declaration of Richard B. Lee on Behalf of AT&T Corp. ¶ 45 (Dec. 16, 2003) ("AT&T Comments, Lee Decl."). But the CLECs have it backwards: powerful market forces deter

FASB, Statement of Financial Accounting Concepts No. 2, "Qualitative Characteristics of Accounting Information," Figure 1 at 20, Glossary (1980) ("FASB Concept Statement 2").

incumbent LECs, like all other public companies, from understating asset lives in their financial reporting. As Dr. Lacey has explained, shorter lives produce higher expenses, lower net income, and lower asset values, all of which may serve to *lower* stock prices. Lacey Decl. ¶ 30. Shorter lives could also be a concern to creditors, causing them to raise their required interest rates. *Id.* The alleged "incentives" thus work the other way, and should, if anything, provide comfort that GAAP lives are *not* overly short.

Further, regulatory safeguards such as the Sarbanes-Oxley Act, *see* 15 U.S.C. §§ 7201-7266, and SEC audit and financial statement certification requirements, *see* 17 C.F.R. §§ 210.3-01, 210.2-02(b), are specifically designed to ensure that a company's financial statements fairly present the financial condition and results of the company. In fact, the inclusion in a company's financial statement of any false or misleading information — including inaccurate or systematically "biased" information about a company's depreciation expenses — puts a company and its officers at risk of an enforcement action by the SEC, the United States Department of Justice, and state governments, and could result in both criminal and civil penalties. *See*, *e.g.*, 18 U.S.C. §§ 1350(c), 1341.

In short, GAAP lives are far more accurate and relevant than the Commission's regulatory lives. The Commission's prescribed lives predate both the 1996 Act and the explosion of wireless, cable telephony, and IP-based technologies and services that are rapidly eroding the market share of wireline services. It would simply be counterintuitive to assert that this rapid growth in intermodal competition and the accompanying technological revolution in the industry would have *no* effect on the lives of the assets used by the incumbent wireline providers.

The CLECs also point to the fact that the incumbent LEC depreciation reserves ^{21/} have been increasing, and they suggest that this shows that the Commission's lives are, if anything, too short, because otherwise, they contend, the incumbents would be retiring more assets more quickly, causing the reserve to either stay the same or *decrease*. AT&T Comments at 95; MCI Comments at 34; MCI Comments, Lee Decl. ¶¶ 15-21, MCI Comments, Majoros Decl. at 14-18. But this simplistic view of the depreciation reserve is inaccurate. As Dr. Lacey explains, the reserve increases (or decreases) due to a variety of factors entirely unrelated to the regulatory depreciation lives used. *See* Lacey Reply Decl. ¶¶ 10-17. For example, as the average age of a company's assets increases, the total depreciation reserve will likewise increase, because it will reflect all the depreciation taken to date, regardless of whether the depreciation lives for the older assets are accurate. *Id.* ¶¶ 12-14.

The depreciation reserve may also increase if a company is adding *new* assets that have shorter lives than the older assets that remain in place and continue to depreciate. Lacey Reply Decl. ¶¶ 15-17. Because those newly added assets have shorter lives and higher annual depreciation expense relative to the existing assets, the total depreciation reserve will increase more quickly after they are introduced. *Id.* ¶ 17. Therefore, an increase in the total depreciation reserve could indicate that a company is adding new assets (with shorter lives) faster than it is retiring old ones, something that might very well be true in an era where incumbents are trying to introduce new offerings to compete with intermodal service providers. For example, digital

As Dr. Lacey explains, the depreciation reserve is the accumulation of the depreciation taken to date; for example, if a \$1,000 asset with an estimated life of 10 years depreciates at a rate of 10% per year, then the depreciation reserve is \$100 after Year 1 (*i.e.*, a 10% reserve), \$200 after Year 2 (*i.e.*, a 20% reserve), and so on. *See* Lacey Reply Decl. ¶ 13. When the asset is fully depreciated and retired, the reserve associated with that particular asset returns to zero, and the depreciation process commences again with the purchase of a new/replacement asset. *See* Lacey Reply Decl. ¶ 11.

switching, which requires the purchase of significant amounts of new equipment, has a much shorter depreciable life than copper cable, which predates the advent of digital switching in the network.

Thus, as Dr. Lacey explains, there is no merit to the CLECs' assumption — which underlies their interpretation of the depreciation reserve increase — that additions are continuously equal to retirements. Lacey Reply Decl. ¶ 21. The asset mix in telecommunications networks is in a constant state of churn, as assets are added and retired in no fixed pattern in response to competitive and technological developments. In fact, an increase in the overall depreciation reserve can obscure the fact that specific categories of assets are rapidly depreciating and being replaced, perhaps even sooner than expected. *Id.* ¶¶ 18-19.

The CLECs are also wrong that incumbent LECs' actual retirement experiences as reported to the Commission somehow validate the Commission's prescribed depreciation lives. *See* AT&T Comments at 95; MCI Comments at 34. The actual retirement figures reported for regulatory accounting purposes are not necessarily indicative of the percentage of a company's assets that no longer has economic value. An asset's retirement is reported when the asset is actually and fully removed from service. *See* Lacey Reply Decl. ¶ 28. However, especially for regulated companies that are required to have constant, uninterrupted service, an asset frequently will not be retired if it is still providing some use, no matter how infinitesimal its economic value. *Id.* ¶ 29. For example, as Dr. Lacey explains, if only five pairs in a large cable are still being used (because increased competition or technological advances have rendered the cable largely obsolete), the cable will have virtually no economic value; in fact, the cost of operating

When an asset is retired, it is removed from the assets recorded in a company's financial statements, along with the accumulated depreciation reserve associated with that asset. Lacey Reply Decl. ¶ 28.

and maintaining the cable may very well exceed the revenue it produces, so that it has *no* remaining economic value. *Id.* Nonetheless, a regulated provider might not retire that asset, because, for example, it is legally precluded from discontinuing service to the handful of customers being served. *Id.* Until such time as the asset can be efficiently replaced, retirement therefore might be postponed, notwithstanding that the asset's material economic life is long over.

Furthermore, the reported retirement rate is the product of many variables, and a change in any of them could cause the retirement rate to change regardless of the number of assets being retired. For example, the retirement rate may decrease if a company's total current investment is increasing at a faster rate than the value of the assets being retired. At the same time, the retirement rate may increase when total investment is decreasing: in fact, the CLECs' own data shows this correlation in 2001-2002, when even their data shows an increase in the retirement rate and a decrease in ILEC investment. Neither result necessarily shows anything about lives. Rather, the asset retirement rate is calculated by dividing the total value of the retired assets at the time they were purchased by the total value of all assets in the network at the beginning of the retirement year. Lacey Reply Decl. ¶ 30. Therefore, changes in the total asset value — because prices are changing or because the company is adding significantly more or fewer assets — can cause the actual retirement rate to change as well, regardless of the useful lives of the company's assets. For all of these reasons, the company's retirement data do not necessarily correlate with the *lives* of the underlying assets. *Id.* Indeed, as Dr. Lacey shows, not only is

there no basis for the *conclusions* the CLECs try to draw from their retirement data studies, but the studies themselves are based on a fundamentally flawed methodology. *Id.* ¶¶ 31-37. ^{73/}

Finally, the negative net salvage value ^{74/} argument that MCI introduces into this proceeding is wrong. MCI argues that if the Commission permits incumbents to rely on GAAP depreciation *lives* in setting UNE rates, it must require incumbents to comply with the GAAP rule that generally prohibits inclusion of removal costs in calculating the *amount* of depreciation. ^{75/} MCI Comments at 36; MCI Comments, Majoros Decl. at 25-32. MCI is not disputing that incumbents have the right to recover removal costs, but asserting that they should be charged in one lump sum at the time of removal, rather than levelized over the life of the asset.

That proposal makes no sense in the context of UNE rate-setting (or any other type of regulatory rate-setting process). If removal costs are included with the amount to be depreciated and the recovery thus levelized and spread throughout the asset's life, *all* CLECs that share in the use of the UNE will share in the associated removal costs. But accounting for the expense only in the year it is incurred would impose that cost only on CLECs purchasing UNEs in the year the asset was removed. And it is not even clear *how* this could be done in the context of UNE rates

As Dr. Lacey explains, the formula the CLECs use works only if one assumes that the value of the retirements equals the value of additions — a so-called "steady state" that rarely if ever exists in the real world. When anything other than a steady state is assumed, the formula produces erratic and nonsensical results. *See* Lacey Reply Decl. ¶¶ 31-37

[&]quot;Net salvage value" is the value that a carrier obtains from a retired asset after the costs of removing it are accounted for. A "negative net salvage value" refers to situations in which the cost to remove the asset is more than what the asset is worth. See Lacey Reply Decl. ¶ 38.

Under Statement of Financial Accounting Standards 143, which was adopted by the FASB in 2001, removal costs may be included in the amount to be depreciated only where there is a legal obligation to remove the asset. *See* Statement of Financial Accounting Standards No. 143 (June 2001) ("FAS 143").

since such rates are levelized, and the incumbent cannot suddenly change the rate for an asset during the last year of its life to capture removal costs. Even if there were a means of implementing this rate change, this would provide CLECs that used the UNE early in its life with a subsidy which is contrary to cost causation principles, since *all* CLECs that use the asset contribute to the need for (and thus the cost of) eventually retiring it.

Not surprisingly, the Commission recently considered whether incumbents should adapt their regulatory expense accounting to comply with this rule, which was adopted under GAAP only in 2001, and determined that, consistent with its existing accounting rules, ^{76/} incumbents should continue capitalizing the cost of retiring an asset over the course of its life, regardless of whether a legal obligation to remove it exists, rather than recording any such costs all at once upon the asset's retirement. As Dr. Lacey explains, the GAAP net salvage rule, set forth in FAS 143, was adopted primarily to ensure consistency in recording liability for asset removal. Lacey Reply Decl. 39. Although the Commission ordinarily "incorporate[s] changes in generally accepted accounting principles into its regulatory accounting," it found that the new net salvage value rule set forth in FAS 143 would conflict with the "regulatory objectives" embodied in the Commission's accounting rules, and thus held that telecommunications carriers should not comply with FAS 143 for regulatory accounting purposes. As noted above, the only fair and practicable means of ensuring that regulated rates properly recover removal costs is to levelize them and collect them from all users during the asset's life.

⁷⁶/ See 47 C.F.R. § 32.3100(c).

See Order, In the Matter of Financial Accounting Standards Board, 17 FCC Rcd 25552, 25553 ¶ 5 (2002).

 $[\]frac{78}{}$ *Id.* at 25553 ¶ 4.

There accordingly is no reason for the Commission to revisit this decision when it adopts (as it should) GAAP lives in setting UNE rates. Instead, the Commission should reaffirm its holding that annual depreciation expense may properly include a share of removal or "net salvage value" costs, and should make clear that this rule is not inconsistent with determining lives based on GAAP. Departing from GAAP in this limited fashion does not undermine GAAP's overall commitment to neutrality and accuracy.

2. Depreciation Rate

As the Commission recognized, setting accurate lives does not necessarily ensure proper recovery of the resulting depreciation expense if UNE rates are reset and reduced every few years at intervals far shorter than the depreciable lives of most assets. The CLECs' efforts to show that this is not a valid concern are unsuccessful. For example, AT&T argues that the depreciation methodology used by many states — the "equal life group" method — is already front-loaded, so that most depreciation will have been recovered before the UNE rates are reset, and any "adjustment" (such as shortening lives, or, as the Commission suggests, accelerated depreciation) would lead to overrecovery. AT&T Comments at 98. But as Dr. Lacey explains, the CLECs oversimplify "equal life group" depreciation and its ability to safeguard recovery of ILECs' depreciation costs. Lacey Reply Decl. ¶ 48-49. The equal life group methodology, which uses averaging as a shorthand for calculating depreciation, recovers most depreciation cost early in the period only if assets are never replaced. Lacey Reply Decl. ¶ 49. UNE rates are designed to reflect an incumbent's real costs, and in a real network, assets are not just retired but are then replaced, and depreciation continues. Lacey Reply Decl. ¶ 50. Therefore, the

See NPRM at 18980-82 ¶¶ 102-08; see also David M. Mandy & William W. Sharkey, "Dynamic Pricing and Investment from Static Proxy Models," OSP Working Paper No. 40 at 1 (Sept. 2003).

Commission's concerns about underrecovery through UNE rates where the interval between UNE rate cases is shorter than the relevant asset lives are not in fact ameliorated by existing depreciation methodologies.

D. Cost of Capital

As the Commission already has recognized, the cost of capital input must fully reflect both investors' risk-based expectations in a market characterized by vigorous intra- and intermodal competition and additional regulatory risks that incumbents face under the UNE regime. The Commission should affirm that the best methodology for calculating a forward-looking cost of capital consists of two steps: (1) calculating the cost of capital that reflects the risks associated with participation in a competitive market; and (2) adjusting this figure upwards to reflect the unique risks imposed on ILECs by the UNE regulatory regime.

1. Competitive Market Cost of Capital

The Commission correctly concluded in its *Triennial Review Order* that the "cost of capital should reflect the risks of a competitive market" in which "all facilities-based carriers . . . face the risk of losing customers to other facilities-based carriers." *Triennial Review Order* at 17396 ¶ 681. The competitive assumptions used in calculating cost of capital are critically important because, as the Commission "specifically recognized" in the *Local Competition Order*, as well as the *Triennial Review Order*, "increased competition . . . lead[s] to increased risk" and "warrant[s] an increased cost of capital." *Id.* (citing *Local Competition Order* at 15846-47 ¶ 679 15856 ¶ 702). Underestimating the full cost of capital would "not provide optimal incentives for investment" and "would discourage competitive LECs from investing in their own facilities and thus slow the development of facilities-based competition." *Id.* 17396-97 ¶ 681-82. And this remains true when prices are calculated under an economically correct forward-looking pricing

approach that does not use the unrealistic TELRIC assumption that technological innovations are ubiquitously and instantaneously incorporated into existing networks.

At a conceptual level, even the CLECs concede that the cost of capital should be measured in view of "the risks associated with existing and potential future competitive entry." AT&T Comments at 80. However, the CLECs attempt to muddy the waters by downplaying the existing level of competition for UNE-provision. As a factual matter, this claim is inaccurate because it ignores (1) the substantial inter-modal competitive challenges posed by wireless, cable telephony, and VoIP technologies, *see supra*, and (2) the fact that rational investors look at expected risk over an investment's entire lifetime, and will thus require compensation for the risks associated with the inevitable *continued* growth in inter- and intra-modal competition.

Reply Declaration of James H. Vander Weide in Support of the Reply Comments of Verizon Telephone Companies ¶ 17 (Jan. 30, 2004) ("Vander Weide Reply Decl.").

The CLECs also claim that it is "folly" to assume that vigorous competition leads to investor risk. AT&T Comments at 89. But the Commission has "specifically recognized" in both the *Local Competition* and *Triennial Review* orders that "increased competition . . . lead[s] to increased risk, which . . . warrant[s] an increased cost of capital." *Triennial Review Order* at 17396 ¶ 681 (citing *Local Competition Order* ¶¶ 679, 702). The CLECs' only support for their contention that there is no relationship between competition and investor risk in the telecommunications industry boils down to the assertion that, over the past few years, increased CLEC facilities-based market share has not correlated with increased RBOC beta values.

Declaration of Lee L. Selwyn on Behalf of AT&T Corp. ¶¶ 46-50 (Dec. 16, 2003) ("AT&T

AT&T Comments at 90 ("the competitive risk of facilities-based competitive entry is virtually non-existent" because of the impairment standard for defining UNEs).

Comments, Selwyn Decl."). However, as Dr. Vander Weide explains, this assertion fails to prove AT&T's counterintuitive position. Among other things, CLEC facilities-based market share is an incomplete measure of competitive conditions, and AT&T's analysis fails to account for all relevant competitive risks. Vander Weide Reply Decl. ¶¶ 23-33.

Thus, the Commission should reaffirm the principle that state commissions must estimate the cost of capital that a UNE provider would encounter in a telecommunications market with full facilities-based competition.

From a practical perspective, estimating the forward-looking cost of capital of an incumbent UNE provider in a competitive market is complicated by the fact that real-world companies that provide UNEs simultaneously deploy capital in a variety of business lines ranging from wireless to broadband services. Regulators thus cannot directly observe the forward-looking returns that investors would demand from a pure UNE provider. As Dr. Vander Weide explains, the best objective measure of the forward-looking competitive cost of capital should be based on market data for a proxy group of companies that face the risks of operating in a competitive market, such as the S&P Industrials. Declaration of James H. Vander Weide Submitted in Support of the Comments of the Verizon Telephone Companies ¶ 40-47 (Dec. 16, 2003) ("Vander Weide Decl."). Using such data, regulators can calculate a competitive cost of capital using a concrete, transparent, and verifiable methodology:

Choosing a Proxy Group. As Dr. Vander Weide explains, the appropriate proxy group for determining a competitive cost of capital is the S&P Industrials, which are a quintessential group of companies operating in competitive markets. Vander Weide Decl. ¶¶ 41-42. Some CLECs argue that cost of capital estimates should be based on data from the Regional Bell Holding Companies ("RBHCs"). AT&T Comments at 81-88; MCI Comments at 31. However,

RBHCs are not an appropriate proxy group for estimating the competitive risk faced by a UNEonly provider operating in a market with full facilities-based competition.

First, RBHCs represent an inappropriately small data sample — currently there are only three such companies still paying dividends. Vander Weide Decl. ¶ 46. This miniscule sample size offers no guarantee that any statistical analyses performed with the data will reflect the economic risk attributable to the RBHCs' competitive environment, rather than the risk attributable to their management, the fact that the telecommunications industry is currently undergoing dramatic restructuring, or other sources of "random noise." Vander Weide Decl. ¶ 46. The S&P Industrials, in contrast, represent 500 companies participating in a number of economic markets. As a result, any sources of random noise will cancel each other out — leaving just the effects of competitive economic risk. *Id.*

Second, despite AT&T's fanciful assertions to the contrary, AT&T Comments at 89, RBHCs are actually *less* risky than a hypothetical company providing only UNE services, since RBHCs are able to diversify away some of the risk of technology substitution because they invest in wireline, wireless, and VoIP technologies. Vander Weide Decl. ¶¶ 44-45. In fact, as Dr. Vander Weide demonstrates, market volatility for the UNE business is significantly higher than the market volatility for the RHBC's other competitive lines of business such as wireless. Vander Weide Reply Decl. ¶ 33. Thus, using RBHC-level data to estimate the risk faced by a pure UNE-provider would *understate* the actual risk of such a company and the premium that investors would demand in order to invest in such a company.

AT&T's regression data, which purport to show that the rise in RBHCs' beta values over the past few years is due to their expansion into wireless and broadband businesses, is not to the contrary. For the reasons that Dr. Vander Weide identifies, beta values are not an accurate measure of investor perceptions, since investors respond to, and demand compensation for, both

Finally, AT&T does not even claim to offer a means for regulators to separate the risk associated with UNE provision from the risk faced by the RHBCs as a whole. In fact, when it comes time to actually estimate the beta value for a UNE provider, AT&T simply pulls the figure of .75 out of a hat. AT&T Comments at 85. AT&T's comments do not even provide a citation for this figure, though a supporting declaration indicates that the number most likely comes from 1997-2000 US West data, the period between when that company spun off its cable operations and when it was acquired by Qwest. AT&T Comments, Selwyn Decl. ¶ 57. US West at that time obviously was not a UNE-only provider and instead had a range of businesses. In any event, a sample size of one, using data that is between four and seven years out of date, cannot produce a reliable estimate.

In sum, given that state commissions must estimate the cost of capital for providing UNEs in a market with full facilities-based competition, and that RBHC-level data simply reflect the competitive risk of a hodgepodge of different lines of business besides providing UNEs, the most appropriate proxy group is a broad sample of firms participating in competitive markets, such as the S&P Industrials.

Cost of Equity Model. The Commission should specify that state commissions use the most straightforward and accurate model for calculating the cost of equity: the single-stage Discounted Cash Flow ("DCF") model as applied to a broad-based sample of firms that participate in competitive markets, namely, the S&P Industrials. Vander Weide Decl. ¶¶ 52-70.

The DCF model estimates the difference between a stock's price and the present value of the stream of future cash flows that a stockholder can expect to receive for owning the stock.

diversifiable and non-diversifiable risk. Vander Weide Reply Decl. ¶¶ 18-22. Moreover, as Dr. Vander Weide also explains, the regression analysis suffers from numerous conceptual errors. *Id.* ¶ 23-33.

This difference measures the premium an investor will demand in order to exchange hard cash for a risky stock. In order to use this model for a publicly-traded stock, regulators need only estimate the future cash flows associated with owning the stock. As Dr. Vander Weide explains, the best estimate of future cash flows is the I/B/E/S mean long-term growth rates, which are based on the projections of a large number of respected financial analysts. *Id.* ¶ 55. Because the model uses investors' own forward-looking projections, it is superior to models like the Capital Asset Pricing Model ("CAPM") that rely on historical data. *Id.* ¶ 66. This advantage is especially pronounced in a market, such as the current telecommunications market, that is undergoing fundamental and fast-paced structural changes. *Id.*

Some CLECs object to the single-stage DCF model on the ground that I/B/E/S growth rates are sometimes greater than the expected long-term growth rates of the economy as a whole, an assumption the CLECs disparage as irrational. AT&T Comments at 83-84; MCI Comments at 32. However, this objection is flawed because (1) cost of capital depends on investors' actual expectations, (2) the effects of cash flows in the distant future have little influence on DCF estimates in any event, because future income flows in the model are discounted at a rate that exceeds the putative growth rate, and (3) I/B/E/S growth rates are consistent with Value Line data on internal growth estimates. Vander Weide Decl. ¶¶ 56-58.

The Commission should also specify that state commissions may not use three-stage or other multi-stage DCF models, which supplement analysts' actual forecasts with the additional assumption that long term growth rates will, at some point, regress to an estimated mean of the long run growth rate for all stocks. *Id.* ¶¶ 59-62. Because multi-stage DCF models are untethered from analysts' actual forecasts, there is simply no reasoned basis on which to judge the plausibility of the growth rate assumptions incorporated in such models and no guarantee that

the estimates such models produce will be reasonable. Moreover, as Dr. Vander Weide has demonstrated, multi-stage DCF models produce the irrational result of lower cost of equity estimates for high-risk companies than for low-risk companies. *Id.* ¶¶ 60-62.

Finally, the Commission should also find that the CAPM is not an acceptable methodology for estimating cost of equity. *Id.* ¶¶ 63-67. Among other things, that model incorrectly assumes that investors care only about non-diversifiable risk. Vander Weide Reply Decl. ¶¶ 18-22, 62-63. As Dr. Vander Weide explains, recent economic research shows that none of the model's assumptions accurately predict behavior of real-world investors. Id. Moreover, even aside from the fact that the CAPM model is not conceptually sound, it uses historical data — about the movements of a particular company's stock relative to the market as a whole — rather than investors' forward-looking estimates. Vander Weide Decl. ¶ 66. Because the CAPM reflects only historical experience, it is fundamentally backwards-looking. But, particularly in a market such as telecommunications which is undergoing significant and fastpaced restructuring, there is no reason to believe that investors' forward-looking estimates of factors such as risk can be predicted by historical data. Vander Weide Reply Decl. ¶ 63. By contrast, the DCF model reflects experts' best guesses about the future risks facing telecommunications providers (e.g. from particular technological innovations or legal reforms), including sources of risk not reflected in historical data.

Cost of Debt. The regulators' second task is to estimate the cost of debt. As Dr. Vander Weide has explained, the best proxy is widely available bond indices, such as the yield to maturity on A-rated industrial bonds (adjusted to include ten basis points for flotation costs). Vander Weide Decl. ¶¶ 49, 50. This approach properly uses long-term interest rates, since long-term debt is the principal source of financing for significant infrastructure investment. The

CLECs' suggestion that state regulators look at the very low debt costs associated with short-term debt issues, AT&T Comments at 81-82; MCI Comments at 33, is inappropriate, since short-term debt is not used to finance investments in long-term network assets. Vander Weide Decl. ¶¶ 49-50.

Capital Structure. The regulator's third task is to estimate a competitive UNE providers' capital structure as a ratio between debt and equity financing. To do so, regulators should look to the average debt/equity ratios measured with reference to market prices of competitive firms such as the S&P Industrials — which yield an estimate of over 80% equity and less than 20% debt for 1998 to 2002. Id. ¶ 74. Some CLECs propose looking to "book value" capital structures, which reflect ILECs' historical costs. MCI Comments at 31-32. As Dr. Vander Weide has explained, this approach does not measure what investors would demand today if ILECs were to seek capital and thus is fundamentally inconsistent with the Commission's commitment to forward-looking costs. Vander Weide Decl. ¶¶ 71-74. Perhaps in recognition of this point, AT&T proposes that regulators look to a firm's "target weighting of debt and equity." AT&T Comments at 87. However, AT&T's comments provide no explanation of how to determine "target weighting" and, one of its economists concedes that "target weighting" cannot be directly observed. Declaration of Terry L. Murray on behalf of AT&T Corp. ¶¶ 109-120 (Dec. 16, 2003) ("AT&T Comments, Murray Decl."). In the same declaration, AT&T suggests that "target weighting" can be estimated, through an unspecified methodology, as a blending of market and book values. Id. In other words, the "target weighting" argument simply turns out to be an attempt to return to the book value weighting methodology which AT&T cannot defend directly. Vander Weide Reply Decl. ¶¶ 34-39. In any event, AT&T's assertion that current market structures are inefficient and somehow will move toward AT&T's assumed target over

time is belied by the facts that (1) the average capital structure of the S&P Industrials (and even the RBHCs) has remained stable over time and (2) the S&P Industrials operate in fully competitive markets and are clearly efficient, yet their capital structures are no where near the "target" AT&T posits. Vander Weide Reply Decl. ¶¶ 40-46. Moreover, it is especially telling that AT&T's own expert, Mr. Selwyn, uses market-based debt/equity ratios — not book values, nor a "target weighted" blend of the two — in another context, namely his regression analysis of the telecommunications market. AT&T Comments, Selwyn Decl. ¶ 46. In using the market-based data, Mr. Selwyn simply followed the practice of the Value Line Investment surveys, which were his data source and which are widely-used by financial professionals. AT&T Comments, Selwyn Decl., "Attachment 3: Data Sources" at 6. This simply confirms that market-based data are the experts' choice for estimating capital structure.

2. Regulatory Risks Inherent in Providing UNEs

In addition to the risks associated with participation in a competitive market, as the Commission has explained to the Supreme Court, "an appropriate cost of capital determination [also] takes into account . . . risks associated with the regulatory regime to which a firm is subject." Reply Brief for the Respondent at 12 n.8, Verizon Communications, Inc. v. FCC, 535 U.S. 467 (2002) (Nos. 00-511, 00-555, 00-587, 00-590, 00-602) (emphasis added). In its initial comments, Verizon showed that there are two sources of regulatory risk that are not accounted for in the general calculation of a cost of capital described above and that require an upward adjustment to the figure derived in the previous section. See Verizon Comments at 73-76. The CLECs do not address these risks, other than by ritually invoking the mantra that financial markets have already accounted for all sources of risk associated with competitive entry. See, e.g., AT&T Comments at 88. However, this facile CLEC argument is entirely unresponsive to the fact that incumbent LECs face sources of risk above and beyond the risks facing other firms

in competitive markets and how the cost of capital estimates generated by models such as the DCF and CAPM fail to account for these risks. For this reason, a cost of capital calculated with reference to ordinary competitive firms or even the RHBC holding companies will underestimate incumbent LECs' cost of capital with respect to the provision of UNEs, thus requiring upward adjustment as described below:

Cancelable leases. The first additional source of risk comes from the fact that CLECs can walk away from their UNE leases at any time. As Dr. Vander Weide explains, this right to cancel is extremely valuable to the CLECs. Vander Weide Decl. ¶¶ 14-24. For instance, it permits CLECs to leave the ILECs' network whenever demand turns out to be less than anticipated or a new technology arrives that allows bypass of the ILECs' facilities. It also permits CLECs to cancel existing leases and demand new, lower prices each time state regulators reduce UNE rates. Of course, the CLECs' gains are the ILECs' losses since, as Dr. Vander Weide explains, a customer's right to cancel at any time necessarily adds to a company's financial risk. *Id.* ¶¶ 15-18. To be sure, ILECs are not alone in facing risks of cancellation. Rental car companies also face similar risks although ILECs face higher risks since many of their assets are fixed and cannot be moved in response to shifts in demand, while a rental car company easily can move cars if demand patterns change. Even then rental car companies charge a daily rate that includes a premium reflecting this additional financial risk, which is why the daily cost to rent a car is higher than the daily rate for a long term car lease. The estimate of an ILEC's forward-looking costs must reflect a similar risk premium.

As Dr. Vander Weide explains, neither the DCF nor the CAPM models measures this risk of cancelable operating leases. Vander Weide Reply Decl. ¶¶ 66-68. Economists, however, have developed tools which can measure the risk associated with offering cancelable operating

leases. Vander Weide Decl. ¶¶ 22-23. As an example, Dr. Vander Weide applied this methodology to data from California, and estimated that the cost of capital should be revised upwards by approximately 400 basis points. *Id.* ¶ 23 & Attachment C. The Commission should affirm that the cost of capital should reflect this financial risk inherent in the UNE regulatory regime.

Sunk Cost Option Value. The second source of risk faced by ILECs that is not captured in the calculation of an ordinary competitive cost of capital stems from the fact that ILECs must make sunk investments, while CLECs have far greater flexibility in how to time their investments. Declaration of Robert Pindyck ¶¶ 33-38 (Dec. 16, 2003) ("Pindyck Decl."). When making an investment, the ILEC must choose among a number of different technologies under conditions of considerable uncertainty about which one will eventually prove most efficient, and then make largely irreversible investment decisions. The CLEC, however, has the option of taking UNEs and waiting to make an investment until it can assess how technology and demand conditions have changed and determine the best investment given those changes. As Professor Pindyck explains, this option to "wait and see" has a well-recognized value. Id. ¶¶ 7-10. For the ILEC, however, the *inability* to "wait and see" obviously increases its economic risk. *Id.* ¶¶ 26-27. Thus, any accurate estimate of an ILECs' actual risk under facilities-based competition must add this source of risk to the general competitive risk estimate, even after the cancelable lease adjustment. As Dr. Vander Weide explains, the DCF (and CAPM) models do not account for this risk, because it is measured by the value of the option to the CLEC, which is not included in any of the inputs to those models. Vander Weide Reply Decl. ¶¶ 66-68. Professor Pindyck explains, however, that this option-based risk can be quantified using well-recognized options pricing formulae, and how to do so. Pindyck Decl. ¶¶ 33-38 & Att. A.

E. Non-Recurring Costs

The Commission has consistently recognized that ILECs are entitled to recover the non-recurring costs that they incur in providing UNEs to a CLEC. Nonetheless, current TELRIC pricing rules have often resulted in non-recurring rates that prevent ILECs from recovering their actual non-recurring costs and send improper economic signals to CLECs concerning the cost of entry and customer acquisition. In order to address these problems, the Commission should reform its pricing rules to account more accurately for the real-world attributes of the ILEC's network by permitting ILECs to recover the actual out-of-pocket costs that they incur in providing a UNE to a CLEC. Moreover, the Commission should make clear that ILECs are entitled to recover those costs the way that they are incurred, through upfront, non-recurring charges paid by the CLEC.

1. ILECs Are Entitled To Recover Their Out-Of-Pocket Costs.

Non-recurring charges should be based on the out-of-pocket, non-recurring costs that the ILEC will incur in providing UNEs to a CLEC. Using the ILECs' out-of-pocket costs as a basis for non-recurring rates would both compensate the ILECs for their out-of-pocket costs and send the correct economic signals. Shelanski Decl ¶ 55. The Commission has long-recognized that the ILECs are entitled to recover through non-recurring rates, "their full one-time costs of providing, terminating or modifying a[] . . . service. This is consistent with [the Commission's] policies encouraging the recovery of costs from cost causers and would reduce the subsidy of short-term users by longer term customers" As the Commission has explained, non-recurring tasks "clearly generate costs for the LECs. To the extent that customers seek to avoid such costs,

Memorandum Opinion and Order, *Investigation of Interstate Access Tariff Non-Recurring Charges*, 2 FCC Rcd 3498, 3501-02 ¶ 32-33 (1987) ("*Non-Recurring Charges Order*").

they seek a subsidy. The creation of such a subsidy would be at odds with our stated goal of achieving cost-based. . . rates."83/ If the CLECs are not required to pay the full non-recurring costs of their UNE requests, the market will receive distorted economic signals, and carriers will inevitably make inefficient entry decisions.

The use of ILECs' actual data to develop non-recurring rates will produce efficient, forward-looking charges. *See* Shelanski Decl. ¶ 56. Contrary to AT&T's assertion that such a "real-world" approach replicates the inefficiencies in the ILECs' networks, AT&T Comments at 105-06, there is ample evidence that the ILECs' non-recurring costs are based on efficient practices and are driven by ILECs' incentives to reduce these costs. First, many of the non-recurring activities for UNEs involve systems and processes that are similar to those that the ILECs use to provision their retail and access services. Price caps and competitive pressures have created incentives for ILECs to perform these activities efficiently. Shelanski Decl. ¶ 58.

Second, non-recurring activities that are performed only for wholesale services typically have been requested and developed in collaborative proceedings and have been subject to intensive review, and thus have been designed consistent with CLEC and state commission input. *Id.* In addition, performance measures have pressured ILECs to automate their non-recurring costs as much as possible, thereby resulting in lower non-recurring costs. *Id.* Finally, once a state has set non-recurring rates, ILECs have every reason to be efficient during the time the rates are in effect since inefficient processes would only increase the ILECs' costs without any corresponding increase in their revenues (or CLECs' costs). *Id.* ¶ 59.

Memorandum Opinion and Order, *Investigation of Special Access Tariffs of Local Exchange Carriers*, CC Docket No. 85-166, 1986 FCC LEXIS 4103, at *13 (Jan. 24, 1986).

Furthermore, basing non-recurring rates on ILECs' actual non-recurring costs would increase the transparency and verifiability of these rates. The ILECs' actual costs are based on actual times to perform a task, the percentage of times a task is needed, and labor rates, all of which are capable of objective measurement and are *not* solely the product of subjective opinion. Relying on these costs therefore would result in rates that are the result of an objective, transparent, and verifiable ratemaking process. AT&T's assertion that the use of real-world costs will not reduce speculation in regulatory proceedings because the ILECs cannot be trusted to accurately report their real-world experience, AT&T Comments at 105-06; AT&T Comments, Murray Decl. ¶¶ 160-162, is unfounded and, in any case, such data can be tested through methods such as third-party validation.

The CLECs argue that non-recurring rates should be based on a model that assumes a "state of the art" network that uses the most efficient technologies, instead of the ILECs' actual costs. AT&T Comments at 106-07; AT&T Comments, Murray Decl. ¶¶ 192-95. This argument is unsound. It would send distorted economic signals to ignore some of the labor costs that ILECs actually incur today simply because they *might* be reduced or eliminated using some other hypothetical network. Where a CLEC requests a non-recurring task and an ILEC incurs a cost in response to that request, the CLEC, not the ILEC, should pay that cost. To do otherwise would insulate the CLEC from the cost they caused, thereby sending improper economic signals that would result in inefficient entry and customer acquisition decisions. Shelanski Decl. ¶ 56.

The CLECs' proposal is not even consistent with the current TELRIC rules. The Commission has made clear that it is improper to assume technology for TELRIC purposes that is not actually deployed and capable of performing the relevant function in at least *some* carrier's network, and may not be technology that theoretically "may be available in the future."

Triennial Review Order at 17392 ¶ 670 n.2020. Nonetheless, the CLECs contend that non-recurring rates should be based on a model that assumes technology that *no* carrier has deployed. For example, AT&T asserts that properly forward-looking OSS would enable ILECs to process orders automatically with only 2% fallout. Yet, it is undisputed that no carrier can or has deployed OSS that enable it to process orders with only 2% fallout. AT&T attempts to justify its unsubstantiated 2% fallout figure on the ground that it consists only of orders that fallout due to CLEC error. AT&T Comments at 110; AT&T Comments, Murray Decl. ¶ 201. But that figure is completely unrealistic, and basing non-recurring charges on such a fiction would not provide CLECs with any incentive to improve their own performance and would fail to compensate incumbents for costs they will actually incur. Moreover, ILECs efficiently engage in manual tasks in many cases other than "fallout," including, for example, for elements that require custom designing and cases in which it is more efficient to provision an order (e.g., the ordered volume of a particular UNE is so low that it is not worth incurring the costs to automate the relevant tasks).

2. ILECs Should Recover Non-Recurring Costs Through Non-Recurring Rates Paid By The Cost-Causer.

ILECs should recover non-recurring costs the way they are incurred — through non-recurring charges paid by the carrier that caused the cost. Requiring the ILEC to recover non-recurring costs only through periodic recurring payments would distort economic signals sent to both ILECs and CLECs. Because the ILEC must pay for non-recurring costs out-of-pocket, the requirement that ILECs recover non-recurring costs on a recurring basis shifts the risk of non-recovery from the CLEC to the ILEC. AT&T does not deny this effect, but instead argues that the ILEC should bear the risk because non-recurring costs are sunk costs and therefore allegedly

have a greater effect on CLECs. AT&T Comments at 103; AT&T Comments, Murray Decl. ¶¶ 128-131. Such risk shifting, however, would have numerous negative effects.

First, requiring ILECs to recover non-recurring costs only through periodic recurring payments would effectively force the ILEC to act as the CLEC's banker, extending credit to the CLEC for immediate cash outlays. Shelanski Decl. ¶ 60. But the Commission has acknowledged that "LECs should not be forced to underwrite the risk" of CLECs' entry into the market. 84/ Second, it would result in a subsidy that flows from "long term" users of the network — here, the ILECs — to "short term" users — the CLECs. Non-Recurring Charges Order at 3501-02 ¶¶ 32-33. For example, if a CLEC orders a non-recurring service, but goes out of business before covering the costs of that service through recurring payments, the ILEC must bear the costs, thereby subsidizing the CLEC. Id. ¶ 60. The Commission has stated that such a subsidy is contrary to Commission policy. *Non-Recurring Charges Order* at 3501-02 ¶¶ 32-33. Similarly, the recovery of non-recurring costs through recurring rates would subsidize the CLECs that consume the most non-recurring labor by imposing costs on competitors that do not benefit from the particular non-recurring tasks that their fellow CLECs demand. Shelanski Decl. ¶ 61. Shifting the risk of underrecovery of non-recurring costs from ILECs to CLECs is not necessary: CLECs are simply not disadvantaged by the application of non-recurring rates for the specific non-recurring work that they request. Such up-front costs are a necessary part of doing business for both the ILECs and CLECs. As the D.C. Circuit has recognized, the Act is not designed to address "cost disparities that are universal as between new entrants and incumbents in any industry." See USTA, 290 F.3d at 427 (emphasis in original).

See Second Report and Order, Local Exchange Carriers' Rates, Terms, and Conditions for Expanded Interconnection through Physical Collocation for Special Access and Switched Transport, 12 FCC Rcd 18730, 18750 ¶ 33 (1997).

If the Commission were to require the ILECs to recover non-recurring costs through recurring rates, such charges would have to be spread across an *estimate* of some measure of forward-looking usage over time. This would require accurate forecasts of the number of CLECs who will eventually order the relevant facilities, the average length of time CLECs will retain the facilities, and the selection of the number of years over which to recover and amortize the expense. Such forecasts are inherently less verifiable than the observed out of pocket expenditures. In addition, non-recurring rates would need to include a risk premium to compensate for the added financial risk. Shelanski Decl. ¶ 61. The inclusion of a risk premium would add more speculation into the non-recurring rate calculation and would necessarily drive up recurring rates.

The CLECs also argue that ILECs should not be permitted to recover non-recurring costs through non-recurring rates where some future CLEC or incumbent may benefit from the non-recurring task that the ILEC performs today after the initial CLEC disconnects service.

Accordingly, the CLECs urge the Commission to adopt a "reusability" test to determine if costs are properly recovered through non-recurring or recurring charges. AT&T Comments at 111-12; AT&T Comments, Murray Decl. ¶¶ 244-53; MCI Comments at 38-39.

The CLECs' "reusability" test is not an appropriate definition of non-recurring costs.

Although AT&T asserts that a reusability test would ensure that ILECs recover their "economic cost in a manner that rationally corresponds with how those costs are incurred," AT&T Comments, Murray Decl. ¶ 250, just the opposite is true. The costs that the CLECs suggest shifting from non-recurring to recurring rates are costs that the ILEC incurs on a one-time basis in order to process and provision a particular order for a particular CLEC, not costs incurred over the life of the relevant facility or over the period in which the CLEC takes the UNE. The

possibility that a subsequent carrier might benefit from the work done in connection with a non-recurring activity does not change the non-recurring character of the cost. To take one example, loop conditioning costs are clearly non-recurring even though in theory a subsequent carrier might use the same conditioned loop to provide DSL service. And shifting non-recurring conditioning costs to recurring rates amounts to improperly shifting the risk of non-recovery from the CLEC to the ILEC. The CLEC, and not the ILEC, should bear the risk that there might not be future benefits from that service, since it is the CLEC that enjoys the current benefit and is the cause of the upfront cost. Nor is this result "unfair" — it is equally possible that a CLEC will receive a benefit from a non-recurring task the ILEC performed for its customer in the past.

3. Disconnection and Loop Conditioning Costs Are One-Time Costs That Are Incurred by the ILEC in Response to a CLEC Request.

a) **Disconnection Costs**

The ILECs should be able to recover disconnection costs at the time of connection (appropriately discounted for the time value of money). Although the CLECs recognize that ILECs are entitled to recover disconnection costs, they argue that they should be recovered only at the time of disconnection. *See* AT&T Comments at 114-16; AT&T Comments, Murray Decl. ¶ 200-02. Such a rule, however, would shift the risk of non-recovery to the ILECs in the event that the CLEC cannot pay because, for example, it has gone bankrupt. This risk of non-recovery is substantial, as illustrated by the numerous bankruptcies in the telecommunications industry. As a result, ILECs are left with large uncollectible amounts, which result in higher wholesale and retail prices borne by all customers, rather than the actual cost causers.

Recovery of disconnection costs at the time of connection is standard practice in the retail industry. *NPRM* at 18986-87¶ 127; Comments of NYSDPS at 12-13 (filed Dec. 16, 2003). There is no reason to treat the wholesale market any differently — especially because the

disconnection costs can be determined with reasonable certainty. Every order for service connection also necessarily entails a cost for service disconnection, because that service eventually will be disconnected. Even if, as AT&T suggests, *see* AT&T Comments at 114, the relevant *facility* will not be disconnected in all cases, Verizon still will incur costs for tasks such as changing its network and billing records. CLECs should pay for those costs up-front (discounted by the time value of money) to avoid shifting the risk of non-recovery to ILECs.

b) Loop conditioning charges

The Commission should reaffirm its previous determination that ILECs are entitled to charge for loop conditioning if a CLEC requests conditioning that exceeds the incumbent's network design standards (e.g., removal of load coils on loops longer than 18,000 feet). Loop conditioning costs are incurred on a one-time basis in response to a specific request from a CLEC and should therefore be recovered through a non-recurring charge.

AT&T contends that ILECs should not be permitted to recover loop conditioning costs from CLECs because in a hypothetical, forward-looking network, such costs would not exist.

AT&T Comments at 117; AT&T Comments, Murray Decl. ¶ 281. However, the FCC has found that CLECs are "required to bear the cost" of "modifications to [ILEC] facilities to the extent necessary to accommodate interconnection or access to network elements." Even under the TELRIC rules, the Commission has expressly rejected interpretations of forward-looking costs that assume away costs, such as loop conditioning, that would not be incurred in a hypothetical network, but unquestionably must be performed in the real world. 85/

Local Competition Order at 15692 ¶ 382; Third Report and Order and Fourth Further Notice of Proposed Rulemaking, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, 15 FCC Rcd 3696, 3784 ¶ 193 (1999); Reply Brief of Petitioner, Verizon Communications Inc. v. FCC, 535 U.S. 467 (2002), at 10 n.7 ("[The] [] suggestion . . . that TELRIC authorizes regulators to require incumbents to modify, 'for free,'

F. OSS

Incumbents must be permitted to recover the wholesale-related OSS development and ongoing costs, such as maintenance and software changes, they have actually been required to incur to provide OSS to CLECs, not the hypothetical costs advocated by the CLECs. Further, section 252 of the Act and basic economic principles require that incumbents be permitted to recover their OSS costs in the rates for the access to OSS UNE.

1. The OSS Costs Incumbents Have Incurred and Continue to Incur Are the Best Measure of Forward-Looking OSS Costs.

The costs that incumbents have incurred (and continue to incur) to develop and upgrade their OSS, and the ongoing expenses they incur to maintain those OSS, are the best measure of forward-looking, real-world OSS costs, and the Commission should clarify that incumbents have a right to recover those costs. Even the Wireline Competition Bureau recognized that the costs that incumbents have actually incurred and do incur "represent the best estimate of the current forward-looking cost of deploying new OSS." *Virginia Arbitration Order* at 17934-35 ¶ 541. Moreover, the huge artificial savings assumed by the CLECs' proposed hypothetical costs present a false picture of the real-world costs involved in providing the necessary OSS to CLECs and thus skew the economic signals sent to CLECs.

AT&T argues that that forward-looking OSS costs should be limited to the minimal costs that it contends a hypothetical efficient provider would have incurred to develop multi-provider OSS from the start rather than the costs of retrofitting incumbents' existing systems to accommodate multiple providers. *See* AT&T Comments at 107; AT&T Comments, Murray Decl. ¶ 221. This approach would grossly understate the costs the incumbents actually have

loops to facilitate certain advanced services ignores express FCC directions to the contrary.") (citations omitted).

borne to establish access to OSS. In any event, creating a multi-carrier system from "scratch" would not be the nearly costless exercise AT&T hypothesizes. *See* AT&T Comments, Murray Decl. ¶ 222. The new system would have to be loaded with all the data from the ILEC's preexisting OSS — an enormous and costly exercise that AT&T assumes away. And of course, the availability of all that data necessarily assumes the existence of the ILEC's pre-existing systems, further demonstrating the absurdity of AT&T's scorched earth approach to OSS costs.

The most economically relevant measure of OSS costs is the costs that the incumbents actually have incurred to convert their OSS systems to conform with the requirements under the Act, as well as to upgrade their OSS in response to CLEC demands in industry collaboratives and the Change Management forums and the requirements of national standards bodies, like the Operations and Billing Forum, and to ensure compliance with performance assurance plans.

2. OSS Development Costs Should Be Recovered from CLECs That Use Access to OSS.

AT&T's suggestion that the Commission should excuse CLECs from paying for access to incumbents' OSS and should instead either require the incumbents to bear those costs alone or spread the costs among CLECs and the ILEC's end-users through a per-line surcharge, AT&T Comments at 108, is inconsistent with the Act and rational economic policy. To begin with, the Act requires that CLECs pay for OSS costs. The Commission clearly established in the *Local Competition Order* — in response to requests by AT&T and other CLECs — that access to "operations support systems and the information they contain fall squarely within the definition of 'network element." *Local Competition Order* at 15763 ¶ 516.86/ Accordingly, section 252 of

^{86/} See also id. at 15752-68 ¶ 505-28; 47 U.S.C. § 153(a)(45). The Supreme Court agreed. See AT&T Corp. v. Iowa Utils. Bd., 525 U.S. 366, 386 (1999), aff'd in part, vacated in part sub nom, Verizon Communications, Inc., 535 U.S. 467 (2002).

the Act, as well as the Commission's rules, require that CLECs bear the costs the incumbents incur to provide the OSS UNE. *See* 47 U.S.C. § 252(d)(1). As the Commission has made clear, "[T]he 1996 Act requires a requesting carrier to pay the costs of unbundling" and CLECs should be "required to bear the cost" of "modifications to incumbent LEC facilities to the extent necessary to accommodate interconnection or access to network elements." *Local Competition Order* at 15659-60 ¶ 314, 15602-03 ¶¶ 198-99. And the Commission has specifically recognized that incumbents have the right to recover their OSS costs through UNE rates. 87/

The statutory requirement reflects basic principles of cost causation. The Commission has long supported "policies encouraging the recovery of costs from cost causers." Accordingly, the costs associated with the wholesale OSS that incumbents developed in order to provide CLECs with access to ordering and provisioning systems should be borne by the CLECs that use and benefit from access to those systems. Although AT&T suggests otherwise, the costs of access to OSS relate solely to the incumbents' wholesale service and the OSS used only by the CLECs — not the incumbents' retail customers. Moreover, the CLECs have consistently advocated the continuous upgrade and development of those OSS. See e.g., AT&T Comments, Murray Decl. ¶ 192. The associated costs thus are clearly incurred on behalf of and caused by the CLECs.

See Third Report and Order in CC Docket No. 98-147, Fourth Report and Order in CC Docket No. 96-98, Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, 14 FCC Rcd 20912, 20977 ¶ 144 (1999); ("[I]ncumbent LECs should recover in their line sharing charges those reasonable incremental costs of OSS modification that are caused by the obligation to provide line sharing as an unbundled network element.").

AT&T's arguments as to why the CLECs should be provided with a free ride are easily dismissed. AT&T first argues that CLECs should not be required to bear the costs of OSS because such costs are *not* caused by the CLEC but instead by the "legal mandate that ILECs provide nondiscriminatory access to their OSS as part of the transition to a competitive market." AT&T Comments at 108; AT&T Comments, Murray Decl. ¶ 225. But this argument makes no sense; the "legal mandate" to provide competitive access applies to ILECs' provision of *all* UNEs, not just OSS, and *all* UNE costs the incumbents incur in provisioning UNEs are thus equally "competitive onset" costs. In all cases, the CLEC consumes a facility or resource from the incumbent's network, and must pay the costs the incumbent bears to provide it.

Further, *other* UNE-related costs were incurred only in response to the 1996 Act. For example, hot cut costs are incurred solely as a result of the "transition to a competitive environment." The distinction AT&T seeks to draw provides no basis to disregard the statutory mandate that CLECs pay the costs associated with the UNEs they use. Numerous state commissions thus have approved Verizon's right to recover OSS costs through UNE rates. As the Pennsylvania commission recognized, "access to OSS has been defined by the FCC as an UNE. Therefore, Verizon is entitled to recover its costs to provide CLECs access to OSS;" similarly, the Maryland commission affirmed that OSS is a UNE the costs of which should be recovered from the "CLECs, the direct cost-causers, rather than all Maryland customers." Indeed, any approach that denied incumbents all recovery of the OSS UNE costs that even

Tentative Order, Generic Investigation Re Verizon Pennsylvania, Inc.'s Unbundled Network Element Rates, R-00016683, at 170 (Pa. Pub. Util. Comm'n Oct. 24, 2002) ("Pennsylvania Tentative Order")

Order No. 78552, Investigation Into Rates for Unbundled Network Elements Pursuant to the Telecommunications Act of 1996, Case No. 8879 at 67-68 (Md. Pub. Serv. Comm'n June 30, 2002) ("Maryland UNE Order")

AT&T concedes were incurred in response to a direct mandate under the Act would be blatantly confiscatory.

AT&T next argues that OSS UNE costs would serve as a "barrier to entry" because CLECs must incur their own, separate gateway costs for their own internal systems, *plus* pay the costs of the incumbent's OSS. *See* AT&T Comments at 108. But this argument fails for two reasons. First, OSS costs are generally quite low, and thus are unlikely to deter entry: the monthly recurring OSS charges Verizon collects tend to be significantly under a dollar per loop, and where Verizon is entitled to collect non-recurring OSS charges, those tend to be about or less than \$5.91/2 Second, the mere fact that the CLEC must bear some costs associated with its own network in addition to paying UNE rates associated with its use of the incumbent's network does not make the latter an "entry barrier." Indeed, any CLEC that has any of its own facilities or systems will invariably incur some costs in addition to UNE rates. For example, a CLEC that seeks to use the incumbent's switching UNE might need to expend its own resources to obtain transport capacity, but this does not mean the costs for the UNE become an "entry barrier."

Nor is there any merit to AT&T's suggestion that the Commission's "treatment of number portability costs" provides a basis for requiring ILECs to bear their own OSS costs.

AT&T Comments at 109. The Commission required incumbents to charge their own customers for number portability because Congress so directed. *See* 47 U.S.C. § 251(e)(2). But with respect to UNE costs, Congress has instead directed that the CLECs that use the incumbent's

See, e.g. Maryland UNE Order at 68 (allowing Verizon to recover \$.1367 per CLEC line per month recurring OSS charges); Virginia Arbitration Order at 17930, 17936-37¶ 528, 546 (allowing Verizon to recover \$.84 per CLEC line per month in recurring OSS charges); Findings, Opinion and Order No. 5967, Application of Verizon Delaware, Inc. (F/K/A Bell Atlantic-Delaware, Inc.), for Approval of Its Statement of Terms and Conditions Under § 252(f) of the Telecommunications Act of 1996, Docket No. 96-324 Phase II, at 29, Exhibit A (Del. Pub. Serv. Comm'n June 4, 2002) (adopting a per-query ordering OSS charge of \$2.76).

facilities or systems must pay the costs the incumbent incurs in connection with those facilities or systems — regardless what costs of its own the CLEC may bear to provide service. *See* 47 USC § 252(d)(1)(A).

AT&T's suggestion that OSS costs be recovered via a "per-line surcharge" applied to the ILEC's and the CLECs' lines fares no better. This, too, would simply shift some of the costs away from the cost causers — *i.e.*, the CLECs that use access to OSS — to the ILEC's other customers. It thus is no more consistent with the statute or with economic policy than AT&T's "free ride" proposal; it differs only in degree. 92/

Finally, there is no merit to AT&T's contention that relieving CLECs of the obligation to bear the full costs of access to OSS is permissible because it would provide incumbents with incentives to select the "most efficient means for complying with the mandate to open its markets to competition." AT&T Comments, Murray Decl. ¶ 239. The Commission is not free to ignore the statutory mandate that UNE rates should cover UNE costs.

AT&T is also wrong that the California Public Utilities Commission established a precedent for recovering OSS costs only through an end user surcharge. Rather, the California commission approved *settlement agreements* allowing Verizon (then GTE) and SBC to recover their OSS implementation costs from end-users. The Verizon settlement agreement, signed by the parties and approved by the California commission, explicitly provided that the settlement was without prejudice to Verizon's right "to seek recovery of OSS enhancement or modification costs incurred after 2000, through *wholesale and/or retail service cost proceedings*"

December 1, 2000 Settlement Agreement in California Implementation Cost Phase of the Local Competition Docket I.95-04-044, R.95-04-043 ¶ 15 (emphasis added). Moreover, the settlement agreement explicitly provided that it did not establish a precedent "for purposes of any future or concurrent proceeding." *Id.* ¶ 28 (emphasis added). Indeed, Verizon is seeking to recover the costs it has incurred to maintain and upgrade its OSS since the time of that settlement through a OSS UNE charge in an ongoing California cost proceeding.

3. Ongoing OSS Costs Should Be Recovered Through Specific OSS Recurring Charges, Not Annual Cost Factors.

All OSS costs, including *both* the OSS development costs and the ongoing OSS expenses, should be recovered through specific OSS UNE rates. AT&T suggests that the "ongoing" costs related to OSS instead should be recovered through annual cost factors. AT&T Comments at 111. But as explained above, access to OSS is a separate network element, and is thus subject to the pricing standards in section 252(d)(2) and the Commission's TELRIC pricing rules. *See Pennsylvania Tentative UNE Order* at 170 (recognizing OSS as a UNE); *Maryland UNE Order* at 67-68 (same); *Virginia Arbitration Order* at 1793¶ 538 (rejecting AT&T/WorldCom's argument that OSS costs should be recovered solely through ACFs).

AT&T argues that an annual cost factor approach, which would spread the OSS maintenance and other ongoing costs over all retail and wholesale customers, would be most sensible because ongoing costs relate both to incumbents' wholesale and retail OSS and it is allegedly difficult to distinguish between those costs. *See* AT&T Comments at 111, AT&T Comments, Murray Decl. ¶ 212-13. But it is *not* difficult to differentiate wholesale versus retail OSS costs: contrary to AT&T's suggestion, Verizon, for example, is able to account specifically for the costs it incurs to support and upgrade its OSS and is able to ensure that its costs for access to OSS do not include costs for projects that benefit Verizon's retail operations, but instead relate solely to UNE-related expenditures. Where it is possible to identify and disaggregate costs and drive them to the specific UNE with which they are associated, the appropriate approach is to require purchasers of that UNE to bear those costs, not to spread them across all users whether they rely on that UNE or not.

G. Collocation Power Charges

The Commission should affirm its previous decision that the incumbent may bill for the amount of direct current (DC) power ^{93/} that each CLEC orders from them, whether or not the CLEC ultimately uses all of the ordered power. As the Commission has recognized, such a system properly compensates the incumbent for the costs it incurs in providing DC power capacity to the CLECs. ^{94/} It allows the ILEC to manage power plant demand in its central offices and to make additional investments in power facilities efficiently. At the same time, this system gives CLECs the ultimate control to obtain the amount of power they need.

AT&T and Covad contend that the incumbent should be required to measure the CLECs' actual DC power usage and bill only for that amount. Otherwise, they argue, CLECs will pay for more power than they need, and the ILEC will overrecover its costs. AT&T further argues that the ILEC's power plant investments allegedly are driven by "overall DC power usage in the central office" and therefore are incurred — and should be billed — on a usage-sensitive basis. Otherwise, they argue, CLECs will pay for more power than they need, and the ILEC will overrecover its costs. Otherwise, they argue, CLECs will pay for more power than they need, and the ILEC will overrecover its costs. Otherwise, they argue, CLECs will pay for more power than they need, and the ILEC will overrecover its costs. Otherwise, they argue, CLECs will pay for more power than they need, and the ILEC will overrecover its costs. Otherwise, they argue, CLECs will pay for more power than they need, and the ILEC will overrecover its costs. Otherwise, they argue, CLECs will pay for more power than they need, and the ILEC will overrecover its costs. Otherwise, they argue are the CLECs will pay for more power than they need, and the ILEC will overrecover its costs. Otherwise, they argue are the CLECs will pay for more power than they need, and they are the ILEC will overrecover its costs. Otherwise, they are they are the CLECs will pay for more power than they need they are the they are t

DC power, which is used to operate telecommunications equipment, is different from the alternating current (AC) power that can be obtained by plugging an electrical appliance into a wall socket. Providing DC power on a large scale in central offices requires the ILEC to make significant investments in equipment. *See* n.101.

See Second Report and Order, Local Exchange Carriers' Rates, Terms and Conditions for Expanded Interconnection Through Physical Collocation for Special Access and Switched Transport, 12 FCC Rcd 18730, 18759 ¶ 59 (1997).

^{95/} See AT&T Comments at 123-24; AT&T Comments, Klick Decl. ¶¶ 131-139; Covad Comments at 20-22.

AT&T at 124; AT&T Comments, Klick Decl. ¶ 137; Covad at 21-22. Covad's argument is expressly focused on systems under which CLECs are billed for the amperage at which their equipment is fused. See Covad at 21. Verizon's DC power billing structure does not bill CLECs based on the fusing of their equipment collocated under section 251(c)(6); rather, it bills CLECs based on the amount of load power CLECs specify they will need for their equipment.

^{97/} See AT&T Comments, Klick Decl. ¶ 136.

As this Commission and several states previously have found in rejecting the CLECs' proposal, however, that approach would be inefficient and would likely result in the ILEC's *underrecovering* the costs of the power investment they are required to make to serve CLEC power needs. Indeed, Covad itself stated in a recent New York collocation proceeding that requiring metering "would increase costs to Covad, as well as similarly situated CLECs." ^{98/}

Under an order-based billing system for DC power, CLECs specify the number of amperes they wish to draw on particular power feeds and pay a per-amp monthly recurring charge based on that number of amperes, while the ILEC ensures that power capacity sufficient to accommodate the CLEC's order will be available in the central office. This predictive approach makes sense because collocation equipment operates at a fairly constant drain level, and CLECs thus can easily forecast the amount of power their equipment will need in the foreseeable future. If CLECs need more or less power, they may adjust their initial power order for a fee that covers the costs the ILEC bears to provide the new level of power (such as changing cables and/or fuses).

Order-based billing also ensures that the ILEC is appropriately compensated and allows them to engineer their power plants effectively. ILECs need to know how much power CLECs intend to use in order to provision the necessary power facilities in their central offices efficiently; it is far more cost effective for the incumbent to build power capacity in larger increments in response to CLEC orders than to supplement power capacity repeatedly and on short notice as individual CLECs change their power demands. Without predictive CLEC

Reply Testimony of Michael Clancy on Behalf of Covad Communications, Case 03-C-0980, at 1 (filed with N.Y.P.S.C. Nov. 24, 2003).

To provide DC power ILECs must install and maintain several types of large and expensive facilities, including, among other things, rectifiers, which convert AC power to DC

orders, the ILEC would be forced to make power plant sizing decisions based on nothing more than guesses, which could result in CLECs not having the power they need. Further, a CLEC that tried to draw more power from the plant than the plant was capable of providing on an ongoing basis could cause its own equipment, and the ILEC's and other CLECs' equipment in that central office, to fail. To avoid this outcome, the incumbent would have no choice but to err on the side of building surplus power capacity to serve as a buffer, which would only lead to higher per-amp power rates, since the incumbent would otherwise have no way to recover its costs. Thus, the best way to ensure that rates recover CLEC-caused power investment costs is to allow the ILEC to charge the CLECs for the power they order and the ILEC accordingly makes available. This compensates the ILEC, while removing the guesswork and tying costs more closely to CLEC power needs.

AT&T suggests, however, that ILEC power investments are not incurred in response to CLEC orders, but instead are made incrementally as usage exceeds threshold capacity, and accordingly that the costs are usage-based and should be billed that way. *See* AT&T Comments, Klick Decl. ¶¶ 136, 138. But incumbents bear virtually the same cost to provide the DC power capacity they must provide to the CLECs, whether or not the CLEC actually uses all that capacity. As the New York Public Service Commission recently determined, "the costs associated with [DC] power provisioning are *predominantly fixed*"; only the costs of "commercial power" that ILECs purchase from power utilities as AC power and later convert to

power, emergency generators and high-capacity batteries, which allow operations to continue in the event of a power failure, and large power cables and battery distribution fuse panels, which facilitate distribution of the power from the central office power plant to the telecommunications equipment.

DC power are usage-sensitive. Thus, even if CLECs' actual usage were reliably measured, the result would affect only the small part of the DC power rate that accounts for AC power costs. And the up-front and ongoing costs of measuring actual CLEC DC power usage would dwarf any savings from that usage-based adjustment.

At noted above, this Commission has previously determined that it would "not require LECs to provide power on a measured, actual use basis because we are not persuaded that such a rate structure would reflect the way costs are incurred better than power offered in increments." A number of state commissions have recently reached similar conclusions. In light of the large costs and marginal benefits associated with metering, the Commission

Order Denying Petition and Commencing Proceeding, *Joint Petition of AT&T Communications of New York, Inc. and WorldCom, Inc. for a Declaratory Ruling Concerning the Provisioning of Direct Current Power for Use in Connection with Collocation Spaces by Verizon New York Inc.*, Case 03-C-0085 (N.Y.P.S.C. July 9, 2003) at 7 (emphasis added).

¹⁰¹/ Second Report and Order, *Local Exchange Carriers' Rates, Terms and Conditions for Expanded Interconnection Through Physical Collocation for Special Access and Switched Transport*, 12 FCC Rcd 18730, 18759 ¶ 59 (1997).

See Final Order, Petition of Competitive Carriers for Commission Action to Support Local Competition in BellSouth Telecommunications, Inc.'s Service Territory, Docket Nos. 981834-TP and 990321-TP (Fla. P.S.C. Nov. 26, 2003) (holding that "[c]harges for DC power shall be calculated and applied based on the amount of power that the CLEC requests it be allowed to draw at a given time"); Arbitration Award, Complaint of Birch Telecom of Texas Ltd., L.L.P., AT&T Communications of Texas, L.P., TCG Dallas, Teleport Communications of Houston, Inc. against Southwestern Bell Telephone L.P. for Post-Interconnection Dispute Regarding Overcharges for Power Under SBC-Texas's Physical Collocation Tariff, Docket Nos. 27559, 27730, 27738, 27739, and 27782 (Tex. P.U.C. Sept. 15, 2003) (finding that SBC may base its monthly recurring charge on the CLEC's order as specified in its collocation application); Decision of the Arbitration Panel, Michigan Bell Telephone Company d/b/a SBC Michigan's Petition for Arbitration of Interconnection Rates, Terms and Conditions and Related Arrangements with MCImetro Access Transmission Services, LLC Pursuant to Section 252(b) of the Telecommunications Act of 1996, Case No. U-13758 (Mich. P.S.C. June 26, 2003), at 28-29 (endorsing an arbitral decision that expressly rejected MCI's effort to require SBC to bill DC power based on a usage-based metering system, finding that SBC "should not be required to spend millions in an effort to accommodate [MCI's] proposed [method of] power cost recovery").

should reaffirm that ILECs may continue to charge for DC power based on the orders submitted to them by CLECs.

IV. THE COMMISSION MUST PROVIDE FOR A SEPARATE COMPETITIVELY NEUTRAL MECHANISM TO COMPENSATE ILECS TO THE EXTENT THAT UNE RATES DO NOT ALLOW THEM TO RECOVER THEIR COSTS.

The Commission is required by both the Act and the Constitution to provide for recovery of the ILEC's unrecovered prudent investment in facilities used and useful in providing wholesale service, and the actual operating costs and forward-looking investment costs that it will necessarily incur to provide those facilities. Even in the traditional regulatory takings context, where a utility has voluntarily committed its plant to serving the public, the courts have recognized that the utility is entitled to recover "the capital prudently devoted to the public utility enterprise by the utilities" owners." Here, the necessity of allowing a utility to recover its past prudent investment is even more pronounced, as the ILECs have not *voluntarily* dedicated their plant to providing UNEs to competitors but rather have been compelled by the Act to enter that particular line of business, which is entirely unrelated to the retail telecommunications services they offer as public utilities. Accordingly, as the Commission itself has acknowledged, to the

Duquesne Light Co., 488 U.S. at 309 (citing Missouri ex rel. Southwestern Bell Tel. Co. v. Public Serv. Comm'n, 262 U.S. 276, 291 (1923) (Brandeis, J., dissenting)); see also Democratic Cent. Comm. v. WMATA, 485 F.2d 786, 808 (D.C. Cir. 1973) ("It is well settled that utility investors are entitled to recoup from consumers the full amount of their investment in depreciable assets devoted to public service.").

In the *Local Competition Order*, the Commission pledged that ILECs may "seek relief from the Commission's pricing methodology if they provide specific information to show that the pricing methodology, as applied to them, will result in confiscatory rates" and stated that it intended to consider in its Access Reform Proceeding the creation of "a mechanism separate from rates for interconnection and unbundled network elements" to provide recovery of ILECs' historical costs. *Local Competition Order* at 15872 ¶ 739. In its *Universal Service Order*, the Commission again promised that it would address "legacy costs" in its Access Reform Proceeding. Report and Order, *Federal-State Joint Board on Universal Service*, 12 FCC Rcd 8776, 8901-02 ¶ 230 n.593 (1997). And in its Access Reform Proceeding, the Commission again "recognize[d] the need to examine whether incumbent LECs should be compensated for any historical costs that they have no reasonable opportunity to recover as a result of the transformation from a regulated to competitive marketplace" and said it "intend[ed] to respond fully to concerns about historical cost recovery" that year. First Report and Order, *Access*

extent that the new methodology adopted by the Commission in this proceeding does not allow incumbents to recover these costs, the Commission is obligated to provide for a separate competitively neutral mechanism that will compensate for any shortfall. 105/

The CLECs claim that incumbents have not demonstrated that UNE rates set under TELRIC are confiscatory. *See* AT&T Comments at 19, MCI Comments at 9; Sprint Comments at 8. But Verizon has produced evidence in a number of proceedings — including this one — showing that specific UNE rates set by state commissions using the current TELRIC rules are well below Verizon's historical costs. ^{106/} In particular, Verizon's study demonstrates that UNE rates in place between 1997 and 2002 have already resulted in a substantial shortfall between the wholesale revenues Verizon has received for the UNEs it provided to CLECs and Verizon's historical investment in, and the associated operating expenses for, the facilities it has used to provide those UNEs. Garzillo Decl. ¶¶ 5-6, 31-32. For example, in New York alone, Verizon incurred costs of approximately \$2.4 billion to provide UNEs from 1997 through 2003 that were

Charge Reform, Price Cap Performance Review for Local Exchange Carriers; Transport Rate Structure and Pricing; End User Common Line Charges, 12 FCC Rcd 15982, 16003 ¶ 49 (1997).

See Preseault v. ICC, 494 U.S. 1, 11 (1990) (the Constitution requires "reasonable, certain, and adequate provision for obtaining compensation at the time of the taking").

See, e.g., Declaration of Patrick A. Garzillo in Support of Verizon Virginia Inc.'s Motion for Stay, Petition of WorldCom, Inc. Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia State Corporation Commission Regarding Interconnection Disputes with Verizon Virginia Inc., and for Expedited Arbitration, CC Docket No. 00-218, filed Sept. 29, 2003; Testimony of Harold E. West, III and Marsha S. Prosini, Investigation by the Department of Telecommunications and Energy on its own Motion into the Appropriate Pricing, based upon Total Element Long-Run Incremental Costs, for D.T.E. 01-20 Unbundled Network Elements and Combinations of Unbundled Network Elements, and the Appropriate Avoided Cost Discount for Verizon New England, Inc. d/b/a Verizon Massachusetts's Resale Services in the Commonwealth of Massachusetts, No. 01-20, filed Aug. 13, 2003.

not covered by the TELRIC rates. *Id.* ¶¶ 5, 31. Similarly, Verizon suffered cumulative shortfalls of over \$188 million in Pennsylvania and over \$145 million in Massachusetts due to the confiscatory TELRIC rates in effect during that same period. *Id.* 107/ And Verizon's evidence also demonstrates that, unless the Commission reforms the TELRIC methodology to more closely reflects incumbents' costs, this shortfall will continue to grow at an accelerated rate. *Id.* ¶ 31.

The CLECs' contention that the Bells' total operating income for 2003 demonstrates that TELRIC rates are compensatory is simply wrong. *See* AT&T Comments at 19; Sprint Comments at 7. As Verizon explained in its comments, only those revenues associated with UNEs are relevant to determining whether TELRIC rates are compensatory. *See* Verizon Comments at 91-93. Indeed, it is clear that even where a firm *voluntarily* dedicates a portion of its property to a regulated business, a regulator may not force the portion of the business it is regulating to operate at a loss and claim that the deficiency can be covered by other parts of the firm's business. *See Brooks-Scanlon Co. v. R.R. Comm'n*, 251 U.S. 396, 399 (1920). Similarly, as the Commission itself has acknowledged, in conducting a takings analysis, the agency "may

As explained in Patrick Garzillo's declaration, the shortfall calculations for 2003 in Verizon's opening comments were based on actual UNE-loop and UNE-P volumes for January through September and projected volumes for October through December. Using the actual volume data for these months, which are now available, results in almost identical shortfalls. For example, the shortfall for 2003 based on actual volumes in New Jersey is \$135,800,039, as compared to the estimated \$133,801,882 based on projected volumes for October through December. Similarly, while Verizon initially estimated a shortfall in New York of \$863,892,321 million, the shortfall based on actual volumes for 2003 in New York is \$865,864,088 million. The shortfalls based on actual volumes for Massachusetts and Pennsylvania are similarly close to the estimated shortfalls presented by Verizon in its opening comments.

not consider incumbent LECs' revenue derived from services not under our jurisdiction." 108/Local Competition Order at 15871 ¶ 737 n.1756; see also Smyth v. Ames, 169 U.S. 469, 541 (1898). Accordingly, the ILECs' revenues from other sources — including both retail revenues subject to the jurisdiction of the states and revenues from competitive lines of business — cannot cure UNE rates that fail to provide adequate compensation. In any event, the effect that UNE rates are having on total company revenues and returns does confirm that those rates are far from compensatory. As Verizon demonstrated in its opening comments, as TELRIC rates have dropped and UNE volumes have increased, Verizon's intrastate and total regulated rates of return have rapidly declined. Verizon Comments at 95 n.130; Garzillo Decl. ¶¶ 32-35.

Local Competition Order at 15871 ¶ 737 n.1756; see also Smyth v. Ames, 169 U.S.469, 541 (1898) (a regulator may not justify deficient rates by pointing to revenues from operations under a different sovereign's jurisdiction).

V. RESALE

The Commission must clarify that, under section 252(d)(3), regulators may base the resale discount only on costs that ILECs *will in fact* avoid when providing wholesale service, and may not lump in additional costs that the regulator speculates ILECs *ought* to avoid. Section 252(d)(3) requires that resale rates equal the retail rate less "costs that will be avoided by the local exchange carrier." 47 U.S.C. § 252(d)(3). As the Eighth Circuit has made clear, this command permits the exclusion only of "costs that the ILEC will actually avoid incurring in the future[] because of its wholesale efforts" and not costs that merely "could be or might be avoided." *Iowa Utils. Board v. FCC*, 219 F.3d 744, 755 (8th Cir. 2000). The Commission should adopt regulations providing the states with clear, bright line guidance regarding the implementation of this standard.

Specifically, the Commission should endorse the four clear principles that Verizon set forth in its initial comments. Verizon Comments at 100-05. First, the Commission should affirm that the TELRIC hypothesis of a perfectly competitive market is entirely irrelevant for resale price-setting purposes. Section 252(d)(3) expressly restricts state regulators to considering what costs *in fact will* be. Second, as the Eighth Circuit clarified, *Iowa Util. Bd.*, 219 F.3d at 755, the Commission should confirm that regulators must assume that ILECs will continue to serve retail markets (as of course they must if there are to be retail services to resell). Third, the Commission should make clear that it is *not* reasonable to assume that "all marketing, billing, and collection costs are avoided." *NPRM* at 18991 ¶ 144. Instead, the discount should reflect a detailed cost study that calculates which such costs the incumbent will actually avoid. Fourth, the Commission should clarify that the resale pricing rules do not apply to features not provided

for purchase on a stand-alone basis since those features are not "telecommunications service[s] that the carrier provides at retail to [end users]." 47 U.S.C. § 251(c)(4).

Even though section 252(d)(3)'s plain language and its definitive interpretation by the Eighth Circuit dictate each of these principles, the Commission should adopt concrete rules codifying them in order to ensure that state commissions implement the "actually avoided" standard in a timely manner. For instance, at the CLECs' urging, the Massachusetts Department of Telecommunications and Energy (DTE) has decided that it will not revise pre-existing resale rates set under the now-defunct "avoidable cost" standard until the Commission issues new resale pricing rules; indeed, the DTE opined that the Eighth Circuit's decision was not clear enough to implement *without* FCC guidance. And CLECs continue to argue in rate-setting proceedings that regulators should actually ignore the "actually avoided" standard. Indeed, in this proceeding, AT&T has asked the Commission to adopt the presumption that wholesale rates

Also, the Commission should not revisit its *Local Competition Order* decision that the Subscriber Line Charge (SLC) is not a retail service to which the resale discount applies. *Local Competition Order* at 15958 \P 917; *NPRM* at 18991 \P 146. The SLC is not a service offered to end users.

Interlocutory Order on Part B Motions, Investigation by the Department of Telecommunications and Energy on its own Motion into the Appropriate Pricing, based upon Total Element Long-Run Incremental Costs, for Unbundled Network Elements and Combinations of Unbundled Network Elements, and the Appropriate Avoided Cost Discount for Verizon New England, Inc. d/b/a Verizon Massachusetts' Resale Services in the Commonwealth of Massachusetts, D.T E. 01-20 (April 4, 2001) at 15 ("As AT&T aptly points out, the Eighth Circuit's ruling leaves many issues unanswered, and many assumptions unstated, that must be resolved in order to have a clear methodology to apply. Moreover, . . . we cannot dismiss the possibility that the FCC may alter that approach in its to-be-issued rules on remand. . . . Under these continuing uncertainties, . . . we are persuaded that the most prudent approach at this juncture is to" defer decision on resale rates pending a Commission rulemaking.)

See e.g., Virginia Arbitration Order at 17983 ¶ 672 (AT&T arguing for "the exclusion of all marketing, billing, and collection costs when determining the wholesale discount" and that "a fully competitive local service market should be assumed when determining which costs will be avoided in the future").

cannot include any "marketing and other retail costs incurred by incumbents to compete against CLECs," AT&T Comments at 125, without even trying to show that incumbents would actually avoid this inchoate category of expenses. ^{112/} And AT&T's premise that incumbents even *could* avoid all marketing and retail expenses necessarily disregards the fact that the ILEC would remain in the retail market where it would continue to bear marketing and retail costs in order to remain competitive and successful. The Commission must adopt rules directing the states to dismiss such advocacy as contrary to the proper resale discount methodology.

Finally, the Commission should reaffirm the obvious but nevertheless critical point that the resale discount is not an appropriate mechanism for providing CLECs with a greater margin. The statute makes clear that Congress intended the resale discount to measure only those costs that the ILEC "actually avoid[s]."

And as Verizon previously showed, even where Verizon loses a retail customer, it does *not* avoid *all* marketing and retail expense. There are wholesale-related expenses in the relevant accounts and, so long as Verizon maintains retail customers (a prerequisite to its resale obligation), it would continue to have overhead expenses associated with continued need to maintain marketing and other retail departments. *See* Verizon Comments at 101-03.

VI. PROCEDURAL ISSUES.

A. Timetable and True-up

The Commission should establish a true-up mechanism to account for the difference between what a CLEC pays under current TELRIC rates and what it would pay for the same facilities under rates established pursuant to the Commission's new pricing rules, dating back to the date of any rules issued in this proceeding. The issuance of the Commission's new rules will put CLECs on notice that rates based on the old methodology are below cost and that those rates will change going forward. AT&T suggests that a true-up is inappropriate because it may be years before rates based on the Commission's new rules take effect. AT&T Comments at 132-33. But such a possibility makes it all the *more* critical that the Commission establish a true-up mechanism: otherwise CLECs will be able to continue to take advantage of below-cost UNE rates even after the Commission has recognized those rates are unlawful.

Regardless the Commission should set a timetable for the state commissions to adopt UNE rates pursuant to the new pricing rules so that the old below-cost rates are not perpetuated any longer than necessary. Although AT&T and others suggest that new rates should take effect gradually as existing interconnection agreements expire, AT&T Comments at 131-32; Pa Commission at 7, such a delay in implementing new rates would further injure ILECs — especially in the absence of a true-up — and perpetuate the current false economic signals that discourage investment and encourage uneconomic reliance on UNEs. Both ILECs and CLECs would benefit from the clarity and certainty that would result from setting rates based on the new rules as soon as possible. Finally, AT&T's concern that participating in numerous state proceedings at the same time would place too great a burden on CLECs, AT&T Comments at 131-32, is overstated. By reforming TELRIC so that it is based on objective, verifiable evidence

and putting in place reasonable limits on discovery, the Commission can streamline such proceedings so that the burden on the participating parties is significantly alleviated.

B. Discovery

The Commission should adopt concrete discovery guidelines to streamline UNE cost proceedings. AT&T suggests that extensive discovery would be needed if the Commission reforms its pricing rules so that rates are based on the ILEC's existing network. AT&T Comments at 39. However, the Commission can address any concerns about information imbalance, as well as alleviate the onerous burdens created by current discovery practices, by imposing certain limits and requirements. First, as AT&T and Verizon both suggested, ILECs could provide CLECs with some basic, well-defined accounting and plant-related data that is needed to develop cost studies based on the Commission's new rules. *See* AT&T Comments at 127; Verizon Comments at 106-107. At the same time, the Commission should require that CLECs must provide information concerning their own costs to the extent they challenge ILECs' cost data as too high or otherwise incorrect.

The Commission should also impose certain limits on discovery. No discovery should be permitted until after the cost studies are filed so discovery can be limited only to relevant information, and parties should be required to demonstrate how any additional information they seek is relevant. Moreover, the Commission should adopt a cap on the number of discovery requests and require a party seeking discovery in excess of that number to seek the permission of the state commission. *See* Verizon Comments at 107-109.

CONCLUSION

As set forth above, the Commission should reform TELRIC so that UNE rates are based on the incumbent's actual forward-looking costs and provide concrete guidance on how to set specific inputs based on objective, verifiable data about the incumbent's network, rather than unverifiable hypotheses.

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January 30, 2004

THE VERIZON TELEPHONE COMPANIES

Petitioners Verizon Telephone Companies ("Verizon") are local exchange carriers affiliated with Verizon Communications Inc., a publicly traded company. These companies are:

Contel of the South, Inc. d/b/a/ Verizon Mid-States

GTE Midwest Incorporated d/b/a Verizon Midwest

GTE Southwest Incorporated d/b/a Verizon Southwest

The Micronesian Telecommunications Corporation

Verizon California Inc.

Verizon Delaware Inc.

Verizon Florida Inc.

Verizon Hawaii Inc.

Verizon Maryland Inc.

Verizon New England Inc.

Verizon New Jersey Inc.

Verizon New York Inc.

Verizon North Inc.

Verizon Northwest Inc.

Verizon Pennsylvania Inc.

Verizon South Inc.

Verizon Virginia Inc.

Verizon Washington, DC Inc.

Verizon West Coast Inc.

Verizon West Virginia Inc.

CERTIFICATE OF SERVICE

I, Carole Walsh, do hereby certify that true and accurate copies of the foregoing, Reply Comments of the Verizon Telephone Companies, were served by United States Postal Service, first-class, postage pre-paid, mail this 30th day of January, 2004, to:

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